

**REMARKS**

Claims 1-39 are currently pending in the subject application and are presently under consideration. Claims 40-43 have been added as shown on p. 7 of this Reply. Applicants assert that the new claims are supported by the original specification and do not introduce new subject matter.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

**I. Rejection of Claims 1-6, 8-11, 13-16, 18-25, 27-30, 32-35 and 37-39 Under 35 U.S.C. §103(a)**

Claims 1-6, 8-11, 13-16, 18-25, 27-30, 32-35 and 37-39 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Grandolfo (U.S. Patent No. 7,184,767) in view of Cheng, *et al.* (U.S. Patent No. 6,771,963). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. The combination of Grandolfo and Cheng fails to teach all of the claim limitations.

“Under 35 U.S.C. 103 where the examiner has relied on the teachings of several references, the test is whether or not the references viewed individually and collectively would have suggested the claimed invention to the person possessing ordinary skill in the art. It is to be noted, however, that citing references which merely indicated that isolated elements and/or features recited in the claims are known is not a sufficient basis for concluding that the combination of claimed elements would have been obvious. That is to say, there should be something in the prior art or a convincing line of reasoning in the answer suggesting the desirability of combining the references in such a manner as to arrive at the claimed invention... [I]t would not have been obvious to modify [the prior art] ... without using [the patent application’s] claims as a guide. It is to be noted that simplicity and hindsight are not proper criteria for resolving the issue of obviousness.” *Ex parte Hiyamizu*, 10 USPQ2d 1393 (BPAI 1988).



Claim 1 recites a method of communications from a piconet, comprising engaging in intra-piconet communications, receiving a pilot signal from a foreign terminal, determining that the strength of the pilot signal is below a threshold; and establishing a peer-to-peer connection with the foreign terminal.

In rejecting claim 1, the Examiner rightfully noted that Grandolfo failed to teach or suggest receiving a pilot signal from a foreign terminal; determining that the strength of the pilot signal is below a threshold, looking to Cheng at Col. 2, lines 20-40 for this feature. However, the combination fails to disclose the features of the claim as recited. In particular, neither cited reference addresses maintaining a high data rate by communication by reverting to a peer-to-peer communication when a threshold strength is not determined for the pilot signal. Gandolfo appears to look to the largest area that can be reached, connecting to whatever devices are within range. (See e.g., Col. 5, lines 25-42). Non-controller-capable devices must either join a network [even if this degrades the overall data rate of the piconet] or not communicate at all, going into an error state. (See e.g., Col. 9, lines 39-45).

It could be further argued that Gandolfo teaches away from requiring a power threshold before joining a piconet in order to maintain a high data rate of synchronous communication, while still affording a degree of communication by peer-to-peer communication to such foreign terminals. In Col. 4, lines 46-67, Gandolfo addresses the problems in the prior art for reliance upon wired backbones and the use of ad hoc networks limited to single piconets. Thus, Gandolfo seeks to connect piconets to increase the reach and interconnectivity, although this aim is at odds with maintaining a high data rate of any individual piconet.

In general, the rationale proffered to combine such teachings is to achieve benefits identified in applicants' specification, to overcome problems associated with conventional methods, etc. Applicants respectfully submit that this is an unacceptable and improper basis for a rejection under 35 U.S.C. §103. In essence, the Examiner is basing the rejection on the assertion that it would have been obvious to do something not suggested in the art because so doing would provide advantages stated in Applicants' specification. This sort of rationale has been condemned by the CAFC; *see, e.g., Panduit Corp. v. Dennison Manufacturing Co.*, 1 USPQ2d 1593 (Fed. Cir. 1987).

In particular, Cheng addresses a different problem that also does not suggest the current combination. Cheng addresses the problems of a handoff of a mobile device between two base



stations. The architecture of a cellular communication network is intended for the purpose of continuity of service as the mobile station travels from one cell to another. (See Abstract). The cellular architecture presupposes that the cells overlap so that there is another base station to connect to, unlike the unpredictability of ad hoc networks. Continuity of service to the mobile device is the focus, not focusing on maintaining the high data rate synchronous communication of other terminals. Cheng differs in that a current communication session is ongoing with a base station and a power drop necessitates the handover whereas the claimed invention addresses initiating communication. When the power level of the pilot signal drops in Cheng, the mobile device does not switch to another communication mode with the same base station analogous to peer-to-peer communication. Instead, this determination results in switching base stations. Thus, many differences exist between the teaching of Cheng, requiring significant modifications in order to be applied to the deficiencies of Gandolfo.

Consequently, the cited references either individually or in combination fail to render claim 1 unpatentable. Reconsideration and allowance of claim 1 is respectfully requested, as well as for claims 2-19 and 40-41 that depend there from.

Similarly, claim 20 is directed to the features of claim 1 but in apparatus form and was rejected on the same basis. Thus, for the reasons given above, claim 20 is patentable over the cited references. Reconsideration and allowance of claim 20 is respectfully requested, as well as for claims 21-38 and 42-43 that depend therefrom.

Similar, claim 39 is directed to the features of claim 1 but in means-plus-function form and was rejected on the same basis. Thus, for the reasons given above, claim 39 is patentable over the cited references. Reconsideration and allowance of claim 39 is respectfully requested.

## **II. Rejection of Claims 7, 12, 26 and 31 Under 35 U.S.C. §103(a)**

Claims 7, 12, 26 and 31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Grandolfo (U.S. Patent No. 7,184,767) in view of Cheng, *et al.* (U.S. Patent No. 6,771,963), and further in view of Watanabe, *et al.* (U.S. 2002/0080855). Each of these claims depend from claims discussed above that are distinguishable and patentable over the cited references and thus should also be allowable.



**III. Rejection of Claims 17 and 36 Under 35 U.S.C. §103(a)**

Claims 17 and 36 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Grandolfo (U.S. Patent No. 7,184,767) in view of Cheng, *et al.* (U.S. Patent No. 6,771,963), and further in view of Papasakellariou, *et al.* (U.S. Patent No. 7,133,435). Each of these claims depend from claims discussed above that are distinguishable and patentable over the cited references and thus should also be allowable.



**CONCLUSION**

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063[QUALP842US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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